



11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 (425) 420-9200 (509) 924-9200

FAX 420-9210

(503) 906-9200 (541) 383-9310

24-9290 FAX 906-9210 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M

CLIENT: BRISTOL		INVOICE TO:		TURNAROUND REQUEST in Business Days*						
REPORT TO: AME	KRANAWETTE	BRISTO	-	Organic & Inorganic Analyses 10 7 5 4 3 2 1 < 1						
ADDRESS; AMCHIT	KA ISLAND, F	ALASKA								
PHONE: 907-770-			P.O. NUMBER: 2	090		STD.		um Hydrocarbon Analyses 3 2 1 < 1	1	
PROJECT NAME: AMCH	ITKA			ED ANALYSES		STI	-	Please Specify	_	
PROJECT NUMBER: 210	90						ОТН		_	
SAMPLED BY:						*Turnaro	und Requests	less than standard may incur Rush Cl	narges.	
CLIENT SAMPLE	SAMPLING	3				MATRIX	# OF		NCA WO	
IDENTIFICATION	DATE/TIME	and and				(W, S, O)	CONT.	COMMENTS	ID	
1. 01 AMH4015L		* 1				5		HAVE BATCH #4		
2. 01 AMH4025L	7/20/01 1410	7				5	1			
3. 01 Am H4035L	7/20/01 1415	X				5	and the second		,	
4. CHAMMANALA	and the second control of the second control						No. of Contract of		entre automotive project constraints	
5. 01 AM H4045 L	7/20/01 1420	*				5	-			
6. 01 AM H4055L	7/20/01 1425	X				5	ngephinds-		7	
7.01AMH406SL	7/20/01 1430	X				5	applica.			
8. 01 AM H 4075L	7/20/01 1435	\times				5	- Appendix			
9 OI AM HY 08SL		X				5	appointment.	27		
10. 01 AM H4095L		X				5	6-100	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
11.01 AM H4/05L	7/20/01 1450	X				5	- Marie Control			
12. OIAMH411 SL		X								
13. (-5)	14 MC 25 COS.	1000	701317					~,		
14.		0								
15.										
RELINQUISHED BY: Whe P. PRINT NAME: Kyle	hetersen FIRM: E	SRISTOL	DATE:07/20/01 TIME:15/9	RECEIVED BY: At he print name:	L Wil	FIRM:	NCV.		07/20	
RELINQUISHED BY:			DATE:	RECEIVED BY:			, , , ,	DATE:	-	
PRINT NAME:	FIRM:		TIME:	PRINT NAME:		FIRM:		TIME		
ADDITIONAL REMARKS: COC REV 3/99 PRETREATME	NT SAMPLES FO	OR HAVE BI	ATCH #4					TEMP:	OF	
			The same state in the					ITAGE		



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 **Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

7 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 07/20/01 15:19. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

1112

Work Orders included in this report:

M107041



Anchorage, AK 99502-1116

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 07/21/01 10:05

Project Manager: Anne Kranawetter

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMHV401SL	M107041-01	Soil	07/20/01 14:05	07/20/01 15:19
01AMHV402SL	M107041-02	Soil	07/20/01 14:10	07/20/01 15:19
01AMHV403SL	M107041-03	Soil	07/20/01 14:15	07/20/01 15:19
01AMHV404SL	M107041-04	Soil	07/20/01 14:20	07/20/01 15:19
01AMHV405SL	M107041-05	Soil	07/20/01 14:25	07/20/01 15:19
01AMHV406SL	M107041-06	Soil	07/20/01 14:30	07/20/01 15:19
01AMHV407SL	M107041-07	Soil	07/20/01 14:35	07/20/01 15:19
01AMHV408SL	M107041-08	Soil	07/20/01 14:40	07/20/01 15:19
01AMHV409SL	M107041-09	Soil	07/20/01 14:45	07/20/01 15:19
01AMHV410SL	M107041-10	Soil	07/20/01 14:50	07/20/01 15:19
01AMHV411SL	M107041-11	Soil	07/20/01 14:55	07/20/01 15:19

COC #185

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

07/21/01 10:05

Hydrocarbon Identification per NW-TPH Methodology North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	n Method	Prepared	Analyzed	Batch	Notes
01AMHV401SL (M107041-01) Soil					Sampled: 07/2	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	394	200	mg/kg	1	NWTPH HCID	07/20/01	07/20/01	0107078	D-10
Diesel Range Hydrocarbons	7300	500	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	1170	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	153 %	50-150							S-02
01AMHV402SL (M107041-02) Soil					Sampled: 07/2	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	408	200	mg/kg	1	NWTPH HCID	07/20/01	07/20/01	0107078	D-10
Diesel Range Hydrocarbons	7490	500	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	1170	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	67.1 %	50-150							_
01AMHV403SL (M107041-03) Soil					Sampled: 07/2	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	ND	200	mg/kg	1	NWTPH HCID	07/20/01	07/20/01	0107078	
Diesel Range Hydrocarbons	1690	500	"	"	"	"	"	"	D-16
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	98.1 %	50-150							
01AMHV404SL (M107041-04) Soil					Sampled: 07/2	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	210	200	mg/kg	1	NWTPH HCID	07/20/01	07/20/01	0107078	D-10
Diesel Range Hydrocarbons	4090	500	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	106 %	50-150							
01AMHV405SL (M107041-05) Soil					Sampled: 07/2	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	ND	200	mg/kg	1	NWTPH HCID	07/20/01	07/20/01	0107078	
Diesel Range Hydrocarbons	1740	500	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	86.8 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported: 07/21/01 10:05

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Hydrocarbon Identification per NW-TPH Methodology North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	n Method	Prepared	Analyzed	Batch	Notes
01AMHV406SL (M107041-06) Soil					Sampled: 07/	/20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	ND	200	mg/kg	1	NWTPH HCI	07/20/01	07/20/01	0107078	_
Diesel Range Hydrocarbons	864	500	"	"	"	"	"	"	D-16
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	114 %	50-150							
01AMHV407SL (M107041-07) Soil					Sampled: 07/	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	ND	200	mg/kg	1	NWTPH HCII	07/20/01	07/20/01	0107078	
Diesel Range Hydrocarbons	1350	500	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	118 %	50-150							
01AMHV408SL (M107041-08) Soil					Sampled: 07/	/20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	ND	200	mg/kg	1	NWTPH HCI	07/20/01	07/20/01	0107078	
Diesel Range Hydrocarbons	1300	500	"	"	"	"	"	"	D-16
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	106 %	50-150							
01AMHV409SL (M107041-09) Soil					Sampled: 07/	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	ND	200	mg/kg	1	NWTPH HCII	07/20/01	07/20/01	0107078	_
Diesel Range Hydrocarbons	1340	500	"	"	"	"	"	"	D-16
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	95.8 %	50-150							
01AMHV410SL (M107041-10) Soil					Sampled: 07/	20/01 Rece	eived: 07/20/	01	
Gasoline Range Hydrocarbons	ND	200	mg/kg	1	NWTPH HCI	07/20/01	07/20/01	0107078	
Diesel Range Hydrocarbons	2300	500	"	"	"	"	"	"	
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"	
Surr: 1-Chlorooctadecane	103 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 07/21/01 10:05

Project Manager: Anne Kranawetter

Hydrocarbon Identification per NW-TPH Methodology North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes		
01AMHV411SL (M107041-11) Soil	1AMHV411SL (M107041-11) Soil Sampled: 07/20/01 Received: 07/20/01										
Gasoline Range Hydrocarbons	278	200	mg/kg	1	NWTPH HCID	07/20/01	07/20/01	0107078	D-10		
Diesel Range Hydrocarbons	4210	500	"	"	"	"	"	"			
Heavy Oil Range Hydrocarbons	ND	1000	"	"	"	"	"	"			
Surr: 1-Chlorooctadecane	97.3 %	50-150		•				•	•		

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

07/21/01 10:05

Hydrocarbon Identification per NW-TPH Methodology - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 0107078 - TPH-HCID (WA)

Blank (0107078-BLK1)				Prepared & A	Analyzed: 07/20/01		
Gasoline Range Hydrocarbons	ND	20.0	mg/kg	•			
Diesel Range Hydrocarbons	ND	50.0	"				
Heavy Oil Range Hydrocarbons	ND	100	"				
Surr: 1-Chlorooctadecane	10.0		"	9.46	106 50-1.	50	

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 07/21/01 10:05

Notes and Definitions

D-10 Detected hydrocarbons in the gasoline range appear to be due to overlap of diesel range hydrocarbons.

D-16 Detected hydrocarbons in the diesel do not have a distinct diesel pattern and may be due to heavily weathered diesel.

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds

present in the sample.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M107041 FINAL 07 21 01 1005.mdb
			Default Report (not modified)
M107041-01	NW-HCID mod	1-Chlorooctadecane	S-02
M107041-01	NW-HCID mod	Gasoline Range Hydrocarbons	D-10
M107041-01	NW-HCID mod	1-Chlorooctadecane	Exceeds upper control limit
M107041-02	NW-HCID mod	Gasoline Range Hydrocarbons	D-10
M107041-03	NW-HCID mod	Diesel Range Hydrocarbons	D-16
M107041-04	NW-HCID mod	Gasoline Range Hydrocarbons	D-10
M107041-06	NW-HCID mod	Diesel Range Hydrocarbons	D-16
M107041-08	NW-HCID mod	Diesel Range Hydrocarbons	D-16
M107041-09	NW-HCID mod	Diesel Range Hydrocarbons	D-16
M107041-11	NW-HCID mod	Gasoline Range Hydrocarbons	D-10